

Santa Barbara Countywide IRWM – Prop. 50

Presentation to the State Water Resources Control Board



Santa Barbara Region IRWM Projects - Proposition 50
March 4, 2014, Cal EPA Building, Sacramento

Santa Barbara IRWM Region

- Follows the County's jurisdictional boundaries
- Spans 2,739 sq. miles with 110 miles of coastline
- Includes 8 incorporated cities for a combined total of 70 sq. miles of urban area
 - >46% of land is federally owned
 - ~ 650,000 acres = the Los Padres National Forest
 - ~ 98,000 acres = Vandenberg Air Force Base
 - ~ 34% or 554,000 acres of land (75% of privately held land) is under the Williamson Act and in grazing, cultivated row crops or open space use.



Santa Barbara IRWM Region

5 Principal Watersheds:

Santa Maria River, San Antonio Creek,
Santa Ynez River, South Coast &
Rincon Creek



- Groundwater basins are divided into North County, Santa Ynez River & South Coast for a total of 16 principal basins.
- Annual precipitation in non-drought years ranges from 8 inches near Cuyama Valley to a maximum of about 36 inches at the uppermost elevations of the Santa Ynez Mountains. Average rainfall is approximately 18.18 inches per year.
- Upwards of 70% of all water supplies are local, including groundwater & surface water.



IRWM in the Santa Barbara Region



- 💧 Began in 2005 with collaboration among 29 entities = Regional Water Management Group
- 💧 1st IRWM Plan adopted in 2007
- 💧 Awarded \$25 million under Proposition 50 for 14 IRWM Region wide Projects



IRWM in the Santa Barbara Region



- 💧 Awarded \$550,000 in Prop 84 Round 1 Planning Grant
- 💧 Awarded \$3 million in Prop 84 Round 1 Implementation Grant for 7 Region wide projects
- 💧 Completed an Update to the 2007 Plan in 2013 & submitted it to DWR for review





SANTA BARBARA REGION IRWM

PROPOSITION 50 PROJECTS



SB Prop 50 IRWM Projects



1. Cachuma Operation and Maintenance Board (COMB) Modified Upper Reach Project

Purpose: Increase Water Supply Reliability

Increased COMB's water supply reliability & operational flexibility by replacing critical structures & sections of the over-pressurized South Coast Conduit (SCC) pipeline which supplies the entire S. Coast of SB County with water from Lake Cachuma.



2. Carpinteria Sanitary District - Bluffs Sewer Relocation Project

Purpose: Improve Water Quality & Ecosystem/Habitat Restoration

Replaced ~ six thousand (6,000) linear feet of existing gravity sewer pipeline from edge of Carpinteria Bluffs to within the urban area.



SB Prop 50 IRWM Projects



3. Carpinteria Valley Water District - Central Zone Pipeline Improvements & Demonstration Aquifer Storage & Recovery (ASR) Well

Purpose: Improve Water Quality, Increase Water Supply, Increase Water Supply Reliability, Increase Groundwater

Added to the conjunctive use capability of the Carpinteria Valley Water District's surface & groundwater supply. The well injects (and stores) water in the groundwater basin & the District extracts groundwater.



4. Casmalia Community Services District - Water Tank Replacement Project

Purpose: Water Supply Reliability

Replacement of the storage tank & other portions of the water system that were in poor condition & had exhibited poor reliability. Specifically benefitted a DAC.



SB Prop 50 IRWM Projects

5. City of Guadalupe WWTP Upgrade Project

Purpose: Increased Water Quality

Upgrade & improvement in the collection and delivery system as well as the treatment level of the City of Guadalupe's WWTP. Specifically benefitted a DAC.



6. Santa Barbara County Flood Control District Lower Mission Creek Flood Control & Habitat Restoration Project

Purpose: Improved Flood Control, Improved Water Quality & Habitat Restoration

Enhanced & expanded the natural streambed features. Removed old various bank revetment & widened creek channel. Restored stream channel reduced stream velocities & increased the wetland area. Improved habitat & provided fish passage up the watershed. Removed invasive, non-native plants and trees and replaced native plants and trees. Improved water quality & habitat for aquatic life and birds, but also improved urban runoff filtration & natural treatment of pollutants.



SB Prop 50 IRWM Projects

7. City of Santa Maria WWTP Expansion Project

Purpose: Improve Water Quality, Increase Water Supply, Increase Water Supply Reliability

The City's main source of water is a blend of State Water Project (SWP) water and groundwater. The WWTP Expansion Project provided effluent, treated to secondary level, further filtered through percolation ponds to the groundwater basin at a 65 percent reliability factor. This system improved the overall groundwater quality & reduced demand on imported SWP water.



8. Santa Barbara County Agricultural Commissioner Santa Ynez River Arundo Removal Project

Purpose: Improve Flood Control, Improve Water Quality, Improve Habitat

Surveyed & defined the extent of *Arundo donax* and *Tamarix spp.* within a portion of the riparian system along the Santa Ynez River . The project used both manual & chemical methods to eradicate *Arundo donax* along the defined portion of the River.



SB Prop 50 IRWM Projects

9. Cuyama Community Services District WWTP Effluent Disinfection Project

Purpose: Improve Water Quality, Improve Reliability

The project replaced the gaseous chlorine system with an alternative UV disinfection technology that enables the District to meet both the coliform and disinfection byproducts (bromodichloromethane and dibromochloromethane) discharge limits. Installed solar panels to power the UV system. Specifically benefitted a DAC.



10. Cuyama Community Services District Water Supply Improvement Project

Purpose: Improve Water Supply, Improve Reliability

Removal of a 65 year old elevated water tank.

Replacement with a variable speed pumping system able to supply a range of flows consistent with typical system demands & construction of two sludge drying beds related to the District's arsenic treatment plant. Specifically benefitted a DAC.



SB Prop 50 IRWM Projects



11. Goleta Sanitary District Fairview Ave./San Pedro Creek Sewer Line Relocation Project

Purpose: Improve Water Quality, Improve Reliability, Habitat Restoration

Replacement of the sewer line reduced inflow & infiltration of storm water resulting in a increased capacity for conveyance and treatment of sewage downstream, reducing sewer line surcharges and needs for increased capacity. The relocation of the sewer line out of the creek bank to the opposite side of Fairview Ave eliminated the potential of a sewer line break discharging raw sewage into the Creek & eventually into the Pacific Ocean.



12. Goleta Water District ASR San Ricardo Well Rehabilitation Project

Purpose: Increase Water Supply, Increase Water Supply Reliability Increase Water Quality Increase Groundwater, Increase Drought Protection

Restored & rehabilitated the existing Storage & Recovery Well & groundwater treatment systems to restore productivity, upgrade water quality supplies & to meet emergency conditions.

SB Prop 50 IRWM Projects

13. Laguna County Sanitation District Recycled Water Tank & System Improvement Project

Purpose: Improve Water Quality, Improve Reliability

Improved District's peak demand storage & ensured water quality by converting previous holding pond to a closed tank. Tank reduced water contamination from windblown debris, birds and algae blooms.



14. Vandenberg Village Community Services District Lompoc Regional Wastewater Reclamation Plant Upgrade Project

Purpose: Improve Surface & Groundwater Quality, Improve Reliability, Improve Habitat

The project upgraded treatment level from secondary to tertiary (including nutrient removal), constructed two new oxidation ditches & three new secondary clarifiers, replaced influent pumping station & sludge thickening equipment & replaced the current chemical disinfection system with an ultraviolet disinfection system. Finally, the project installed a new supervisory control and data acquisition system.



💧 Successes of Prop 50

- 💧 14 Completed Projects that yielded the range of benefits identified in the Application
- 💧 3 Environmental Justice Projects that specifically addressed Disadvantaged Communities
- 💧 A portion of Prop 50 Funds were leveraged for other Federal grants & funding opportunities
- 💧 Forged more collaborative working relationships between local agencies & entities
- 💧 Greater community awareness of water & wastewater issues



💧 Lessons Learned

- 💧 Good working relationships are the key to successful projects
- 💧 Healthy communication promotes attainment of project goals & benefits
- 💧 Interagency dialogue along with a collective, collaborative & solution-oriented approach gets the job done
- 💧 DACs need greater flexibility & additional support at the State level beyond the support provided by Regional efforts
- 💧 IRWM is constructive & reaps benefits that extend beyond water resources

